



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/062,976	01/30/2002	John H. Oleinik	10016646-1	2831

7590

11/18/2005

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

CARBONELLO, MICHAEL J

ART UNIT

PAPER NUMBER

2622

DATE MAILED: 11/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/062,976	<b>Applicant(s)</b> OLEINIK ET AL.	
	<b>Examiner</b> Michael J. Carbonello	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01/30/2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2) 1/30/04, 2/6/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The specifications were received on 01/30/2002. The examiner accepts these specifications.

### ***Drawings***

2. The drawings were received on 01/30/2002. The examiner accepts these drawings.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Krist et al.
4. Regarding claims 1, 2, 3 and 34, Krist et al discloses in column 3, lines 56-67 and continuing through column 4, lines 1-9; "a first mechanism capable of converting a received file according to a printer-independent page description language (PDL) into a first interim format; and, a second mechanism capable of converting the received file as converted to a second interim format into a printer-specific printer language." Using the broadest reasonable interpretation the second electronic document at the printing machine to create an output-ready document would be second interim format into a printer-specific language.

5. With respect to claims 2, 17, 23 and 35, Krist et al discloses the method and devices disclosed above, and further discloses; "wherein the first interim format is identical to the second interim format." Krist et al teaches the first electronic copy converted into the second electronic document written in page description language (hereafter referred to as PDL). Further, the second document is in PDL format as part of the conversion process to a printer-specific language, thus using the broadest reasonable interpretation the first and second interim formats would be identical.

6. With respect to claims 3, 18, 22 and 36, Krist et al discloses the method and devices discussed above, and further discloses in column 3, lines 56-67 and continuing through column 4, lines 1-9; "comprising an interface capable of converting the received file from the first interim format to the second interim format, the first interim format different than the second interim format." Krist et al teaches the first electronic document being converted to a second electronic document; using the broadest reasonable interpretation this would be a second format different from the first.

7. Regarding claim 4, Krist et al discloses the method and devices disclosed above, and further discloses in column 9, lines 13-16; "comprising a client input/output (I/O) mechanism to communicatively couple with one or more clients, and capable of receiving the received file from one of the one or more clients." Using the broadest reasonable interpretation the I/O apparatuses and network printing system would be an input/output mechanism that communicates with one or more clients and is able to receive files from more of the inputs.

Art Unit: 2622

8. *(Examiner's note: Figure 10 in {pat. 5,615,015-Krist et al} is improperly labeled. The Network Interface or Network I/F is labeled # 176. It should be labeled # 172, as was discussed in the disclosure column 8, lines 62-67.)*

9. Regarding claim 5, Krist et al discloses the method and devices disclosed above, and further discloses in figure 10, "wherein the client I/O mechanism is able to communicatively couple with the one or more clients via one or more of: a network connection, a serial bus connection, a wireless infrared (IR) connection, and a wireless radio-frequency (RF) connection." Figure 10 clearly shows a network I/F [172] that would be able to connect one or more clients.

10. Regarding claim 6, Krist et al discloses the method and devices disclosed above, and further discloses in figure 10; "comprising a printer input/output (I/O) mechanism to communicatively couple with a printer capable of understanding the received file as converted to the printer-specific printer language." As was disclosed above the documents are converted to a printer specific language; further figure 10 clearly shows a controller [7] a connection bus [174] that is connection the I/O apparatuses [176] with the print servers [178], which would also connect to the printer [8] via the network I/F [172], which would be capable of understanding the received file.

11. Regarding claim 7, Krist et al discloses the method and devices disclosed above, and further discloses in figure 10, "wherein the printer I/O mechanism has a port corresponding to a port of the printer, such that the device directly connects to the printer via the port of the printer I/O mechanism plugging into the port of the printer." Using the broadest reasonable interpretation the image input [6] could be connected via

a port to the printer [8] because it is clearly connected to the controller [7], which is connected to the printer [8].

12. Regarding claim 8, 24 and 26, Krist et al discloses the method and devices disclosed above, and further discloses in figure 10; "wherein each of the first mechanism and the second mechanism is independently upgradeable with respect to one another, the first mechanism independently upgradeable to support one or more additional printer-independent PDLs, and the second mechanism independently upgradeable to support one or more additional printer-specific printer languages." And "upgrading to support a second printer-independent PDL." With respect to claim 8, using the broadest reasonable interpretation, since the I/O apparatus [176] is a separate component than the image input [6] it is possible that each independent component is independently upgradeable to support various printer specific languages. With respect to claims 24 and 26, using the broadest reasonable interpretation, the fact that there multiple devices, (I/O apparatuses and printer servers) these components, specifically an I/O apparatus, could easily be upgraded to support a second printer-independent PDL.

13. Regarding claim 9, Krist et al discloses the method and devices disclosed above, and further discloses in column 3, lines 62-67, continuing through column 4, lines 1-4; "an independently upgradeable printer-independent page description language (PDL) interpretation module, an independently upgradeable printer-specific printer language creation driver module and, a module interface interfacing the printer-independent PDL interpretation module to the printer-specific printer language creation driver module."

Using the broadest reasonable interpretation the components that convert the electronic document to PDL format also interpret the PDL at the printer for a specific printer language, could be viewed as independent modules.

14. Regarding to claim 10, Krist et al discloses the method and devices disclosed above, and disclosed in column 3, lines 56-67 and column 4, lines 1-9; "wherein the printer-independent PDL interpretation module converts a file from a corresponding printer-independent PDL to a first interim format, the module interface converts the file from the first interim format to a second interim format, and the printer-specific printer language creation driver module converts the file from the second interim format to a corresponding printer-specific printer language." Krist et al teaches the first electronic document being converted to a second electronic document and that second format also being interpreted at the printer; using the broadest reasonable interpretation this method would be a printer specific driver module converting the file from a second interim format to a printer specific language.

15. Regarding to claim 11, Krist et al discloses the method and devices disclosed above, and further discloses in figures 2 and 10; "a client input/output (I/O) communication interface coupled to the printer-independent PDL interpretation module and communicatively coupled to one or more clients and, a printer I/O communication interface coupled to the printer-specific printer language creation driver module and communicatively coupled to a printer." Using the broadest reasonable interpretation the I/O apparatuses are client communication interfaces. Further the controller [7], (figure

2) could act as the printer independent PDL module, which is coupled to a printer and I/O device.

16. Regarding to claim 12, Krist et al discloses the method and devices disclosed above, and further discloses in figure 2; "wherein the printer-independent PDL interpretation module comprises one or more printer-independent PDL interpreters corresponding to different PDLs." Using the broadest reasonable interpretation the controller [7], which is depicted in detail in figure 2, would be at least one printer independent PDL interpreter.

17. Regarding to claim 13, Krist et al discloses the method and devices disclosed above, and further discloses in figure 2; "wherein the printer-independent PDL interpretation module is upgradeable to add one or more additional printer-independent PDL interpreters corresponding to additional PDLs." The controller [7] is shown to be composition of components that is it's own sub section from the scanner [6] and printer [8], Using the broadest reasonable interpretation it could be possible to add more components and modules to the controller section to upgrade it as needed, thus making it upgradeable for more PDL interpreters.

18. Regarding to claim 14, Krist et al discloses the method and devices disclosed above, and further discloses in column 3, 63-66; "wherein the printer-specific printer language creation driver module comprises one or more printer-specific printer language creation drivers corresponding to different printers." Using the broadest reasonable interpretation the emitter or driver would be one or more printer specific language creation drivers corresponding to different printers.



19. Regarding to claim 15, Krist et al discloses the method and devices disclosed above, and further discloses figure 2; "wherein the printer-specific printer language creation driver is upgradeable to add one or more additional printer-specific printer language creation drivers corresponding to additional printers." As was disclosed above the various component of this device are comprised of separate subsections. Therefore the individual components could be upgraded as needed to add additional printer specific printer language drivers.

20. Regarding to claim 16, Krist et al discloses the method and devices disclosed above, and further discloses in figure 11 and figure 10; "first means for converting a received file according to a printer-independent page description language (PDL) to a first interim format, second means for converting the received file as converted to a second interim format to a printer-specific printer language and, third means for interfacing the first means with the second means." Using the broadest reasonable interpretation, the step box 210 (fig. 11) shows a document being converted to a PDL. Next the result box at the bottom of the flowchart (fig 11) discloses a converted document being sent to a printer, using the broadest reasonable interpretation that document would be in printer specific printer language. Lastly figure 10 discloses, connections as well at buses [174] between the various components (fig 10), which will allow the various components to interface with each other.

21. Regarding to claim 19, Krist et al discloses the method and devices disclosed above, and further discloses in figure 10; "comprising means for communicating with one or more clients to initially receive the received file." Using the broadest reasonable

interpretation the I/O apparatuses [176], connected to a bus [174], connected to a network [172] connected to a controller [7], would be a means for communicating with clients to receive files. Further the image input [6] is connected to the controller [7], which is another means for communicating with the clients to receive files.

22. Regarding to claim 20, Krist et al discloses the method and devices disclosed above, and further discloses in figure 10; "comprising means for connecting to one or more printers to send the received file as converted from the interim format to the printer-specific printer language for printing." Using the broadest reasonable interpretation, the controller [7] connected to the printer [8] would be a means for connecting one or more printers to send the received files in the printer specific language.

23. Regarding to claim 21, Krist et al discloses the method and devices disclosed above, and further discloses in figure 11, "receiving a file according to a printer-independent page description language (PDL), converting the file from the printer-independent PDL to a first interim format, converting the file from a second interim format to a printer-specific printer language, and sending the file as converted to the printer-specific printer language to a printer for printing." Using the broadest reasonable interpretation, step box [212] and [210] would convert images into PDL format; further the result box transmits the converted input to the printer. Lastly as was disclosed above the PDL is converted from a second interim format before being converted to printer specific language.

24. Regarding claim 25, Krist et al discloses the method and devices discussed above and further discloses in column 3, lines 56-67 through column 4, lines 1-9; "receiving a second file according to the second printer-independent PDL, converting the second file from the second printer-independent PDL to a third interim format; converting the second file internally from the third interim format to the printer-specific printer language, and sending the second file as converted to the printer-specific printer language by the device to the printer for printing." Krist et al discloses a first electronic document, a second electronic document as disclosed above. Further Krist et al discloses an output-ready document. Using the broadest reasonable interpretation the output ready document would be both the third interim format as well as the document in the printer-specific printer language.

25. Regarding claim 27, Krist et al discloses the method and devices discussed above and further discloses in column 4, lines 4-9; "receiving a second file according to the printer-independent PDL, converting the second file from the printer-independent PDL to a third interim format, converting the second file from the third interim format to a fourth interim format, converting the second file from the fourth interim format to the second printer-specific printer language, and sending the second file as converted to the second printer-specific printer language to a second printer for printing." The previous interim formats have been disclosed above. Using the broadest reasonable interpretation "performing the image processing operation on the PDL of the selected page" which is disclosed after the three prior interim formats, could be viewed as the fourth interim format.

26. Regarding claims 28 and 31, Krist et al discloses the method and devices discussed above and further discloses in figure 2; "A computer-readable medium having instructions stored thereon to upgrade a device for converting a file according to a printer-independent page description language (PDL) received from a client to a first interim format and for converting the file as converted to a second interim format to a printer-specific printer language for sending to a printer for printing so that the device is able to convert additional files according to one or more additional printer-independent PDLs to the first interim format." Using the broadest reasonable interpretation, the controller [7] with its disks [56], would be a computer readable medium, with instruction to upgrade a device for converting a file. The scanner [6] would be a type of input device; the controller [7], with the image control [50] and system control [54] could be components to convert the image to a second interim format; with that information being sent to the printer [8].

27. Regarding claims 29 and 32, Krist et al discloses the method and devices discussed above and further discloses in figure 2; "wherein the medium is insertable into the device to upgrade the device to support the one or more additional printer-independent PDLs." Using the broadest reasonable interpretation the make up of the controller [7] is a series of subsystems, which allow the various components to be upgradeable as needed, thereby allowing the device to support one or more additional printer independent PDLs.

28. Regarding claims 30 and 33, Krist et al discloses the method and devices discussed above and further discloses in figure 2; "wherein the instructions are

transferable to a host device communicatively coupled to the device, such that the host device executes the instructions to upgrade the device to support the one or more additional printer-independent PDLs." Using the broadest reasonable interpretation the controller [7] would be the host device. Further using the broadest reasonable interpretation the system control [54] could support one or more addition printer-independent PDLs.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

29. Kaneko discloses; "In case of outputting data including mixed plural different-type images, productivity and cost performance are improved without an operator's complicated manual intervention. To do so, a color printer, a black and white printer and a finisher are electrically connected with others through a data communication path such that these devices can perform data communication with others."

30. McIntyre discloses; "A method for selecting a device personality is presented comprising registering each of a plurality of revisions of one or more accessible personalities, wherein each personality is configured to convert incoming data from a particular language to a low-level data stream. Once registered, appropriate personality revisions are dynamically selected to convert the incoming data, while retaining all registered revisions of the one or more personalities for subsequent use."

31. Love et al discloses; "Apparatus, system and method is provided in which a primary printer prepares print data for use by its resident print engine, or by an alternate

Art Unit: 2622

printer. The primary printer includes subsystems for receiving original print data from a device, such as a computer or scanner, and for converting the original print data into a data format compatible with the alternate printer."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Carbonello whose telephone number is (571) 272-0625. The examiner can normally be reached on Monday - Friday 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael J Carbonello  
Examiner  
Art Unit 2622

MJC

JOSEPH R. POKRZYWA  
PRIMARY EXAMINER  
ART UNIT 2622  
